

**REMARKS**

The Office Action mailed on June 29, 2005, has been reviewed and the comments of the Patent and Trademark Office have been considered. Prior to this paper, claims 1-7 and 10-20 were pending. By this paper, claims 1-2, 4, 7-10 and 12-18 are cancelled without prejudice or disclaimer, and claims 21-29 are added. Therefore, claims 3, 5, 6, 11, and 19-29 are pending in the present application.

Applicants respectfully submit that the present application is in condition for allowance for the reasons that follow.

**Interview of September 14, 2005**

Examiner Lopez is thanked for extending the courtesy of an interview to Applicants' representatives on September 14, 2005, where it was agreed that claims 19 and 20 are not obvious in view of the cited references.

In view of the Personal Interview held on September 14, 2005, Applicants submit that the Interview Summary (a copy of which is attached) provides a complete and proper recordation of the substance of the interview, per MPEP §713.04.

**Power of Attorney**

Applicants refer to the signed Power of Attorney form filed with the paper filed on November 07, 2003 to permit the law firm of Foley and Lardner to prosecute the present application.

Applicants request that Examiner Lopez contact Applicants' representatives at (202) 295-4747 if an examiner's amendment is needed to place the case into allowance.

However, Applicants again request that all other future correspondence concerning this application be sent to:

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**Rejections Under 35 U.S.C. §112, First Paragraph**

In the Office Action, claims 1-7 and 10-17 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. As seen above, in order to advance prosecution, and without prejudice or disclaimer, the language cited in the Office Action is no longer present in any pending claim, and Applicants respectfully submit that the rejection is now moot.

**Rejections Under 35 U.S.C. §112, Second Paragraph**

In the Office Action, claims 4 and 15 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. As seen above, in order to advance prosecution, and without prejudice or disclaimer, claims 4 and 15 have been cancelled, and Applicants respectfully submit that the rejection of these claims is now moot.

**Claim Rejections Under 35 U.S.C. §103(a)**

In the Office Action, Claims 1-7 and 10-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Reiber (U.S. Patent No. 6354,479) in view of Perlberg (U.S. Patent No. 5,421,503).

In order to advance prosecution and without prejudice or disclaimer, Applicants cancel independent claims 1 and 18, and respectfully traverse the rejection of independent claim 19. Applicants also make amendments to claim 19 to address informalities, but these amendments do not change the scope of coverage of claim 19.

Claim 19 recites that “the action of extracting substantially all of the organic thermoplastic material from said green tools or blanks and sintering the thus obtained organic-free performs into dense end products of reduced dimensions includes obtaining the final dimensions of the at least one borehole *during sintering*.” (Emphasis added.) In contrast, both Reiber and Perlberg disclose that a machining step is used to obtain the dimensions of the borehole. Thus, the “final dimensions” of any borehole of Reiber and Perlberg are not obtained “during sintering.” Instead, the final dimensions are obtained after machining. Thus, the combination of Reiber and Perlberg does not teach or suggest each and every element of claim 19, and, therefore, the third requirement of MPEP § 2143 (that “the prior art reference (or references when combined) must teach or suggest all the claim limitations”) is not met in the Office Action.

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The first requirement of MPEP § 2143 (that there “must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings”) is also not satisfied in the Office Action with respect to independent claim 19 for a number of reasons.

For example, MPEP § 2143.01 details the requirements on the PTO for establishing motivation to modify or combine references to reject a claim as obvious. One requirement, as detailed in MPEP § 2143.01, subsection 6, is that “the proposed modification cannot change the principle of operation of a reference – If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810 (CCPA 1959).” In *Ratti*, the CCPA held that the “suggested combination of references would require a substantial reconstruction and redesign of the elements shown in the primary reference.” This substantial redesign would have resulted in changing a rigid seal to a resilient seal. Thus, a reference cannot be modified to render an invention obvious if the modification changes a principle of operation of the reference.

With the above in mind, it is respectfully submitted that since the teachings of both Perlberg and Reiber rely on a machining principle of operation to obtain the final dimensions of their boreholes, substituting sintering to obtain the final dimensions would change the principle of operation of both of those references. Since modifying Perlberg or Reiber to utilize sintering instead of machining to obtain the final dimensions of the boreholes changes the principle of operation of these references, just as changing the rigid seal to a resilient seal was found to change the principle of operation in *Ratti*, “the teachings of [Perlberg and Reiber] are **not sufficient** to render the claims *prima facie* obvious.” (MPEP § 2143.01, emphasis added.)

Applicants further submit that since the principle of operation of both Perlberg or Reiber would be changed if the machining step was eliminated, these references cannot be combined with other references that teach obtaining final borehole dimensions through sintering (assuming *arguendo* that such a reference exists and qualifies as prior art). That is, to reject claim 19, Perlberg and Reiber would have to be eliminated as cited references – completely new references would be needed.

Further, Reiber and Perlberg teach away from the present invention in that they direct the artisan to machine the borehole instead of obtaining the dimensions of the borehole through sintering. MPEP § 2144.05(III), entitled Rebuttal Of *Prima Facie* Case Of Obviousness, states that a “*prima facie* case of obviousness may also be rebutted by showing that the art, in **any** material respect, teaches away from the claimed invention.” (MPEP § 2144.05(III), second paragraph, emphasis added, citations omitted.) Thus, to the extent that a case of obviousness has been made with respect to claim 19, it is hereby rebutted.

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The second requirement of MPEP § 2143 (that “there must be a reasonable expectation of success”) permits references to be modified or combined to reject a claim as obvious **only** if there is a reasonable expectation of success. There is no evidence in the references, and certainly none identified in the Office Action, that one of ordinary skill in the art would have a reasonable expectation of success in achieving Applicants’ invention by combining Reiber with Perlberg, at least with respect to the new claims reciting the diameter of the borehole. The ordinary artisan would simply not have expected to have been able to

obtain these dimensions according to the teachings of Reiber or Perlberg without machining. Thus, one of ordinary skill in the art would not see the combination of the references as successfully producing acceptable tools or blanks for such tools. Because of this, the second criteria of MPEP § 2143 has not been met in the Office Action, a *prima facie* case of obviousness has therefore not been established.

### **New Claims**

As can be seen above, Applicants have added new claims 21-29. Claim 21 further defines the invention of claim 19, detailing that the dimensions of the bore hole include a diameter. Claims 22-24 impart specific dimensions onto the diameter of claim 21. Claims 25-29 also recite that the borehole includes a diameter. These claims are allowable at least due to their dependency from claim 19.

### **Conclusion**

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Examiner Lopez is invited to contact the undersigned by telephone if it is felt that a telephone interview would expedite allowance of the application.

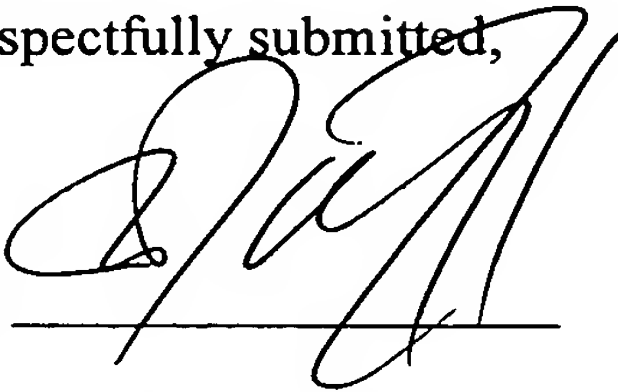
Date Sept 21, 2005

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Respectfully submitted,

By 

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